

PCB ASSEMBLY SPECIFICATIONS

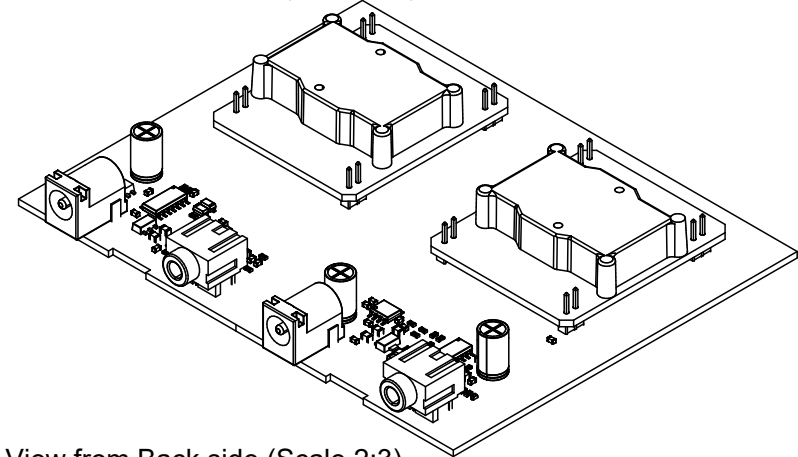
"LTK-MW TX/RX 2019 Q2"

Variant: "[No Variations]"

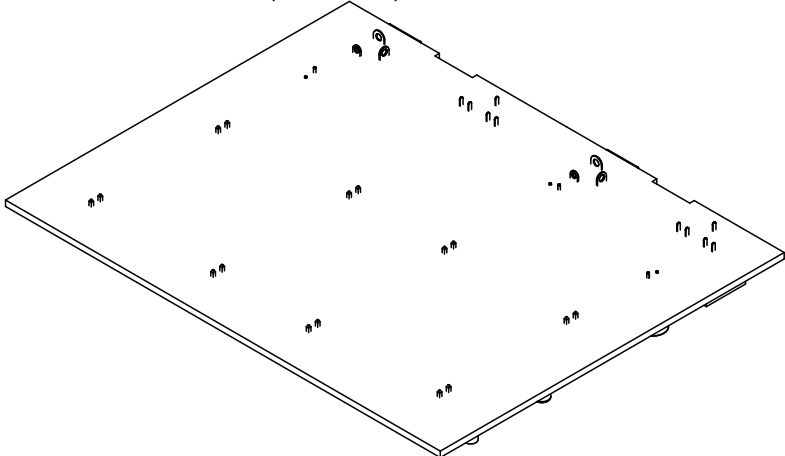
SPECIFICATIONS

NOTE #	NOTE
1	ALL SPECIFICATIONS REFERENCED SHALL BE OF THE LATEST REVISION UNLESS OTHERWISE NOTED
2	SUPPLIER SHALL NOT MODIFY THE DESIGN WITHOUT WRITTEN PERMISSION
4	THE BOM IN THIS DOCUMENT IS PURELY AN AID TO ASSEMBLY OPERATIONS AND MAY NOT HAVE THE MOST UP-TO-DATE DATA OR ALL APPROVED COMPONENT ALTERNATIVE.

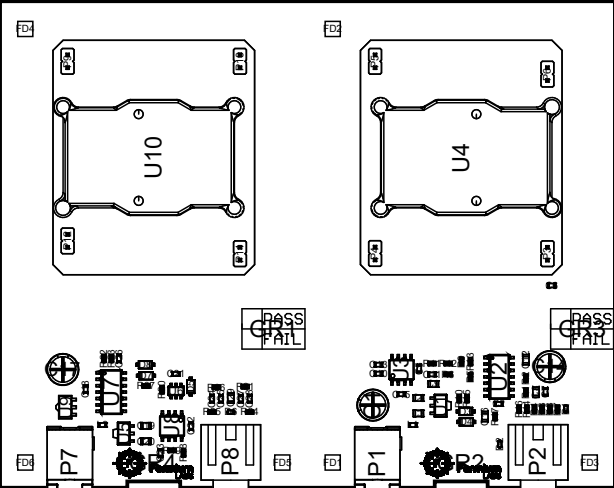
View from Front side (Scale 2:3)



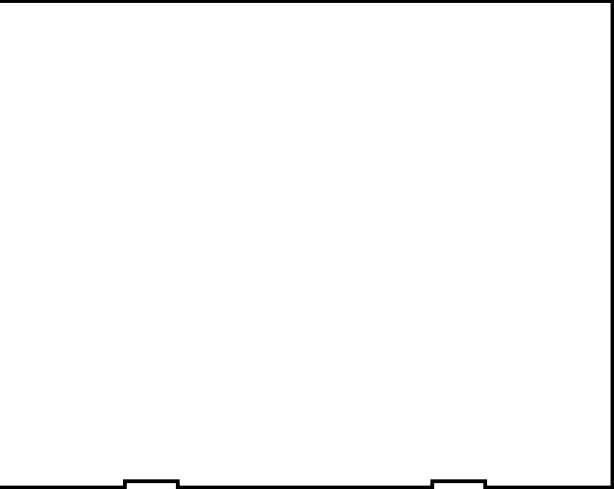
View from Back side (Scale 2:3)



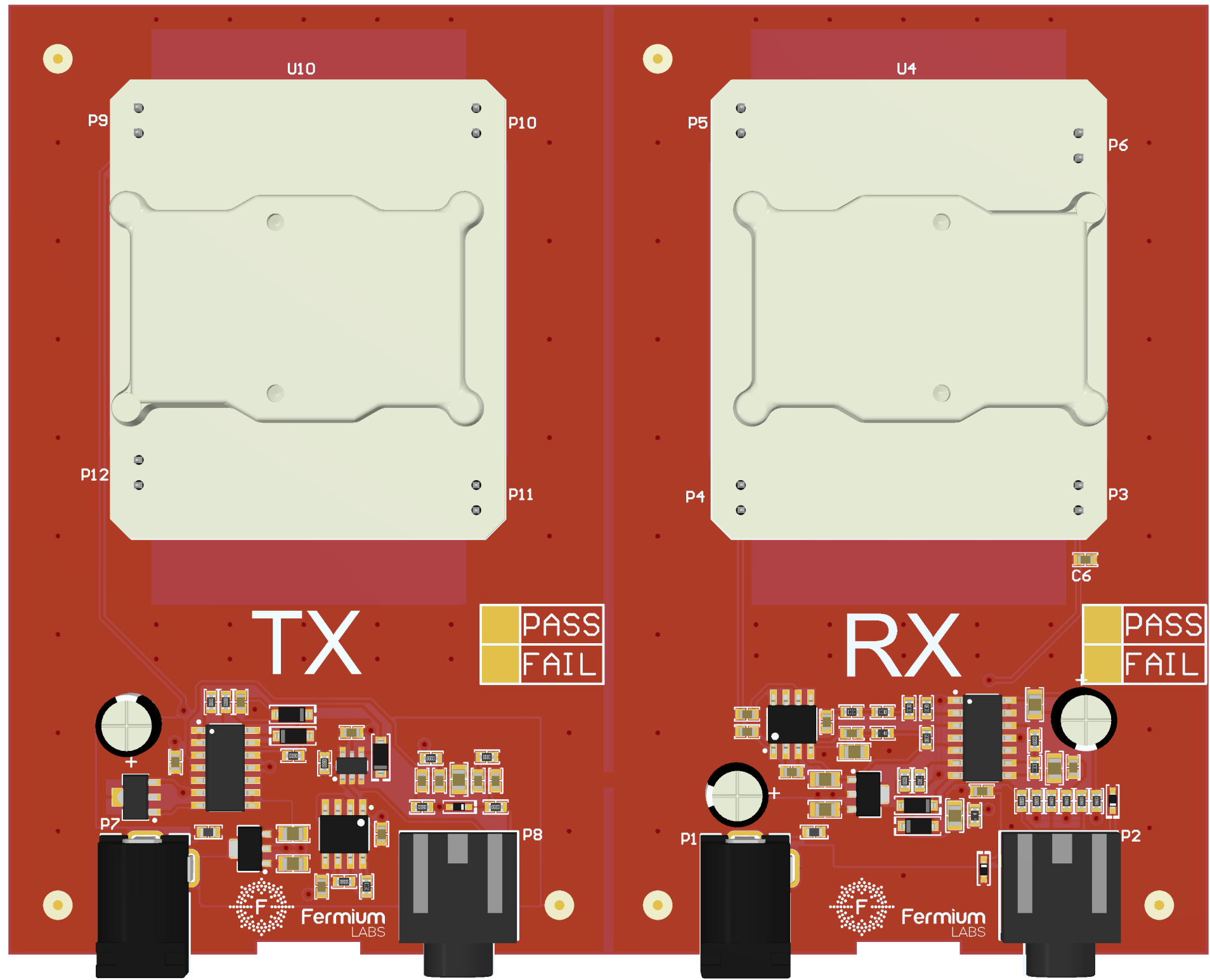
View from Top side (Scale 2:3)



View from Bottom side (Scale 2:3)



Realistic View TOP

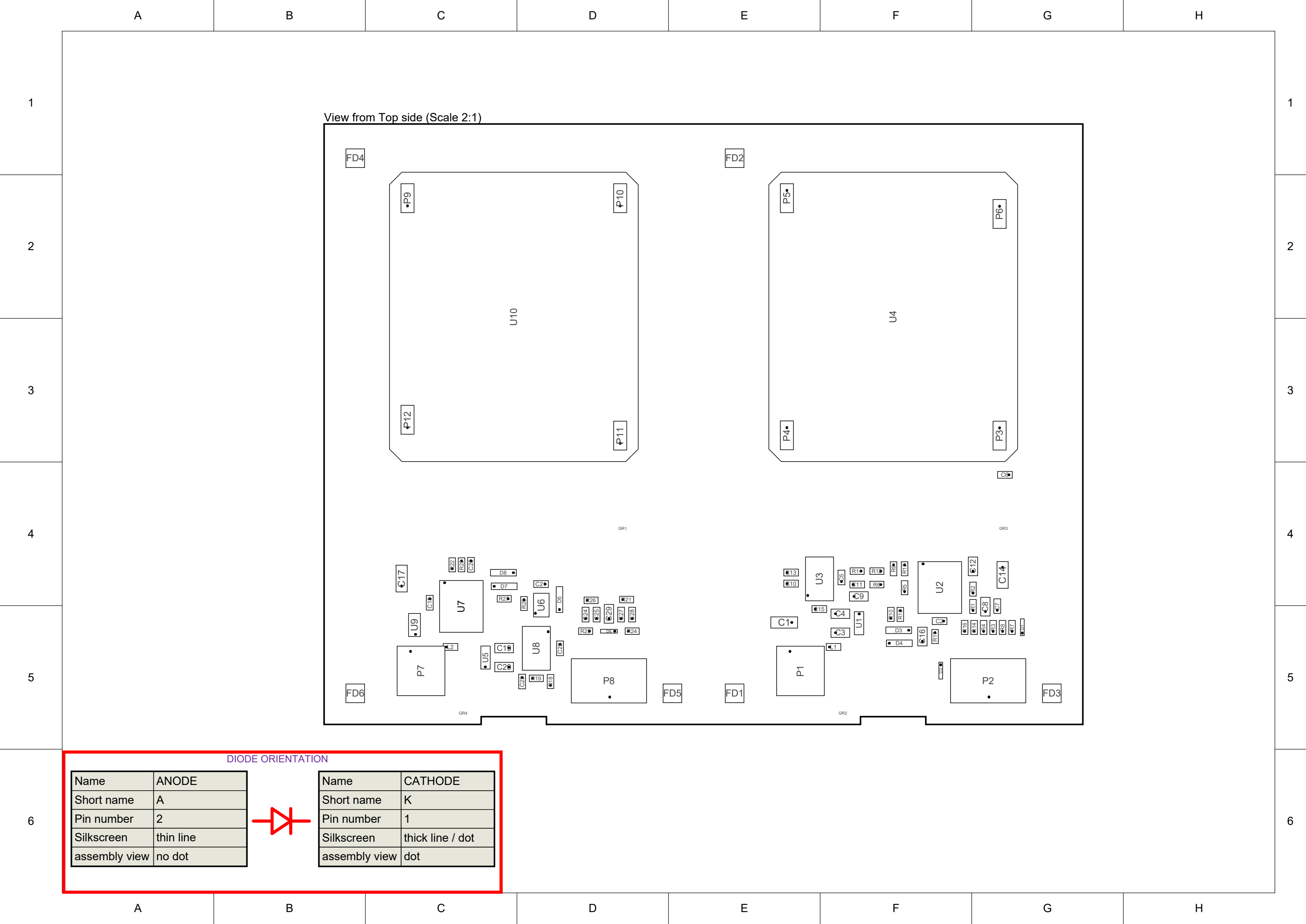


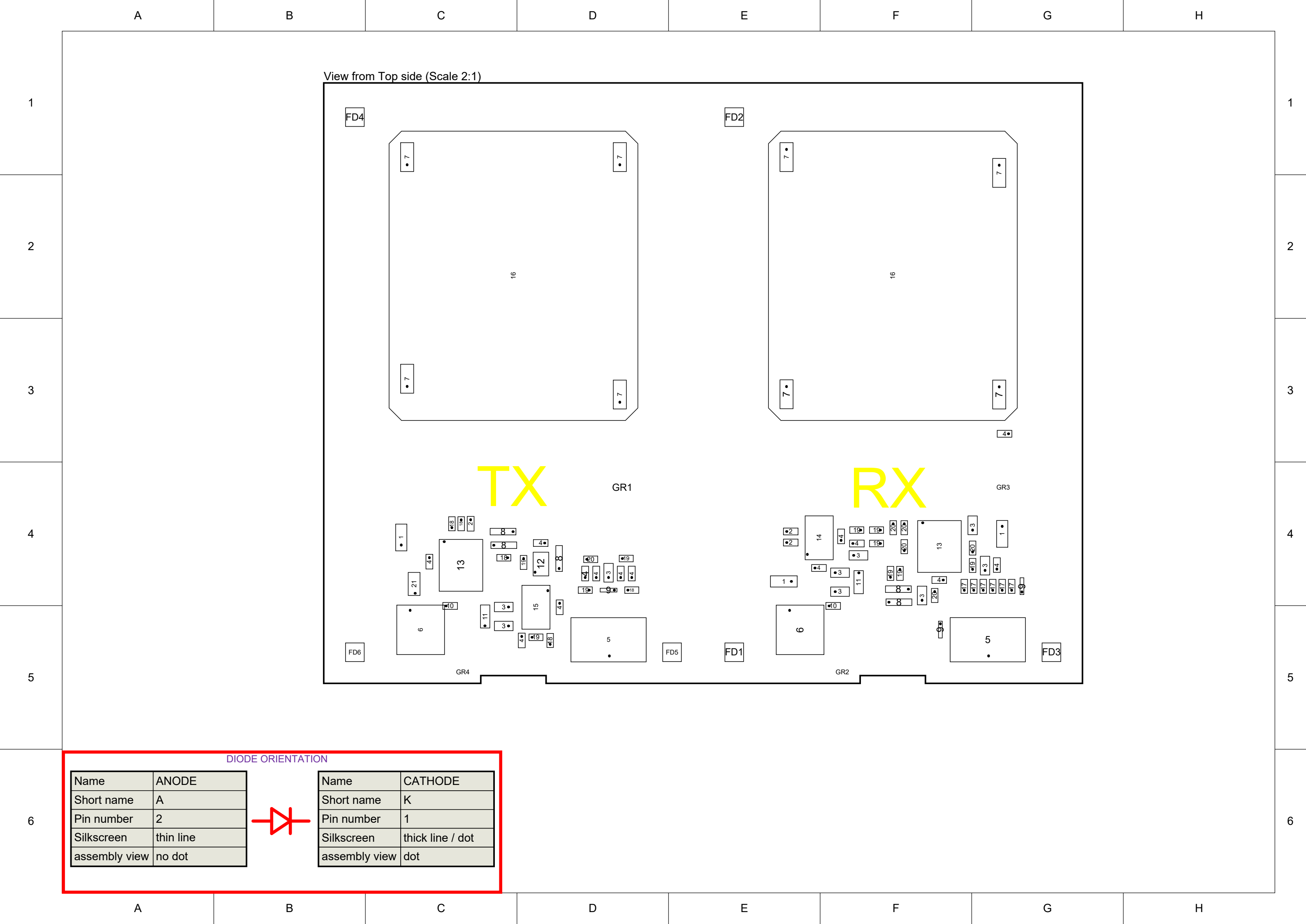
DIODE ORIENTATION

Name	ANODE
Short name	A
Pin number	2
Silkscreen	thin line
assembly view	no dot



Name	CATHODE
Short name	K
Pin number	1
Silkscreen	thick line / dot
assembly view	dot





View from Top side (Scale 2:1)

TX

RX

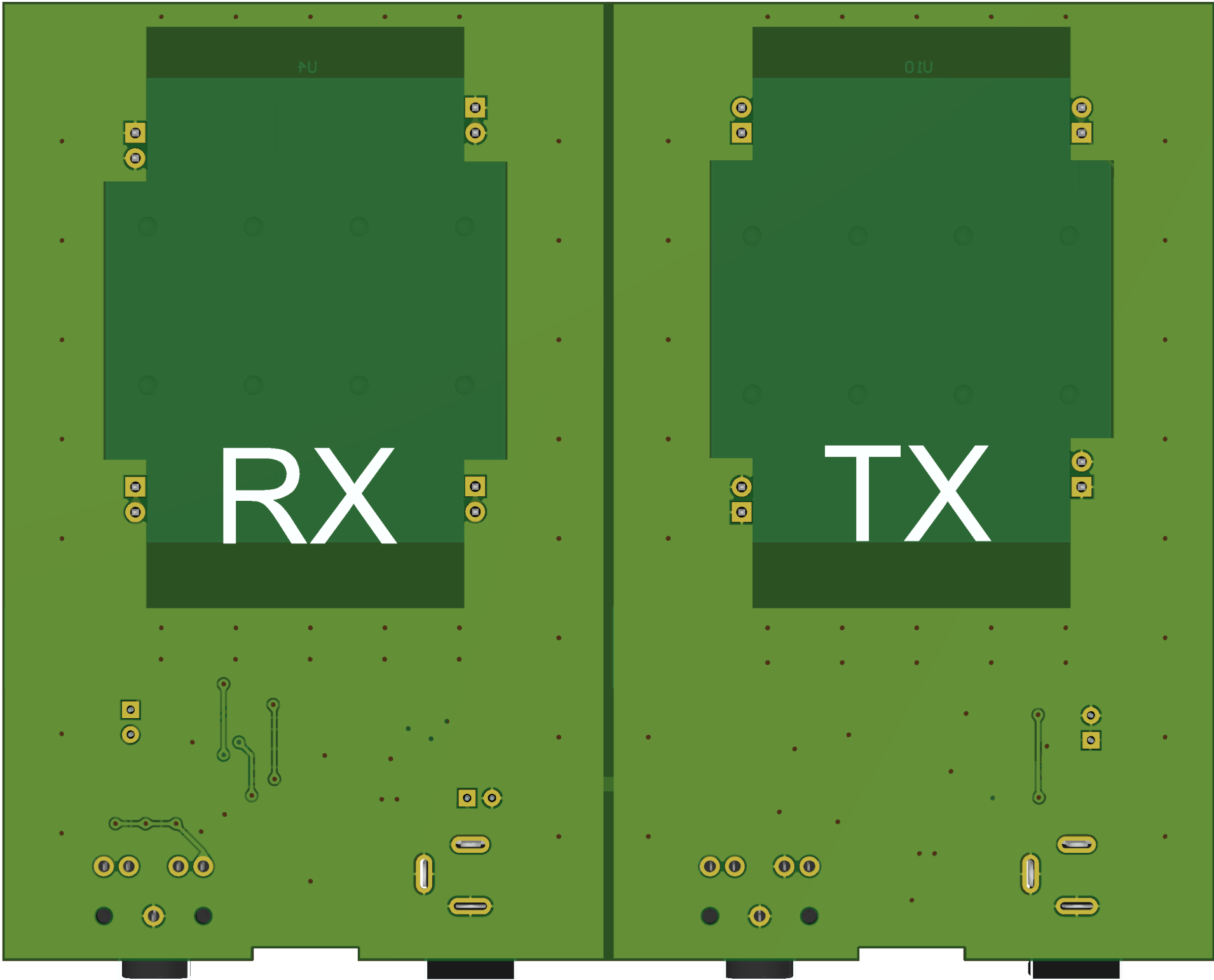
DIODE ORIENTATION

Name	ANODE
Short name	A
Pin number	2
Silkscreen	thin line
assembly view	no dot



Name	CATHODE
Short name	K
Pin number	1
Silkscreen	thick line / dot
assembly view	dot

Realistic View BOTTOM

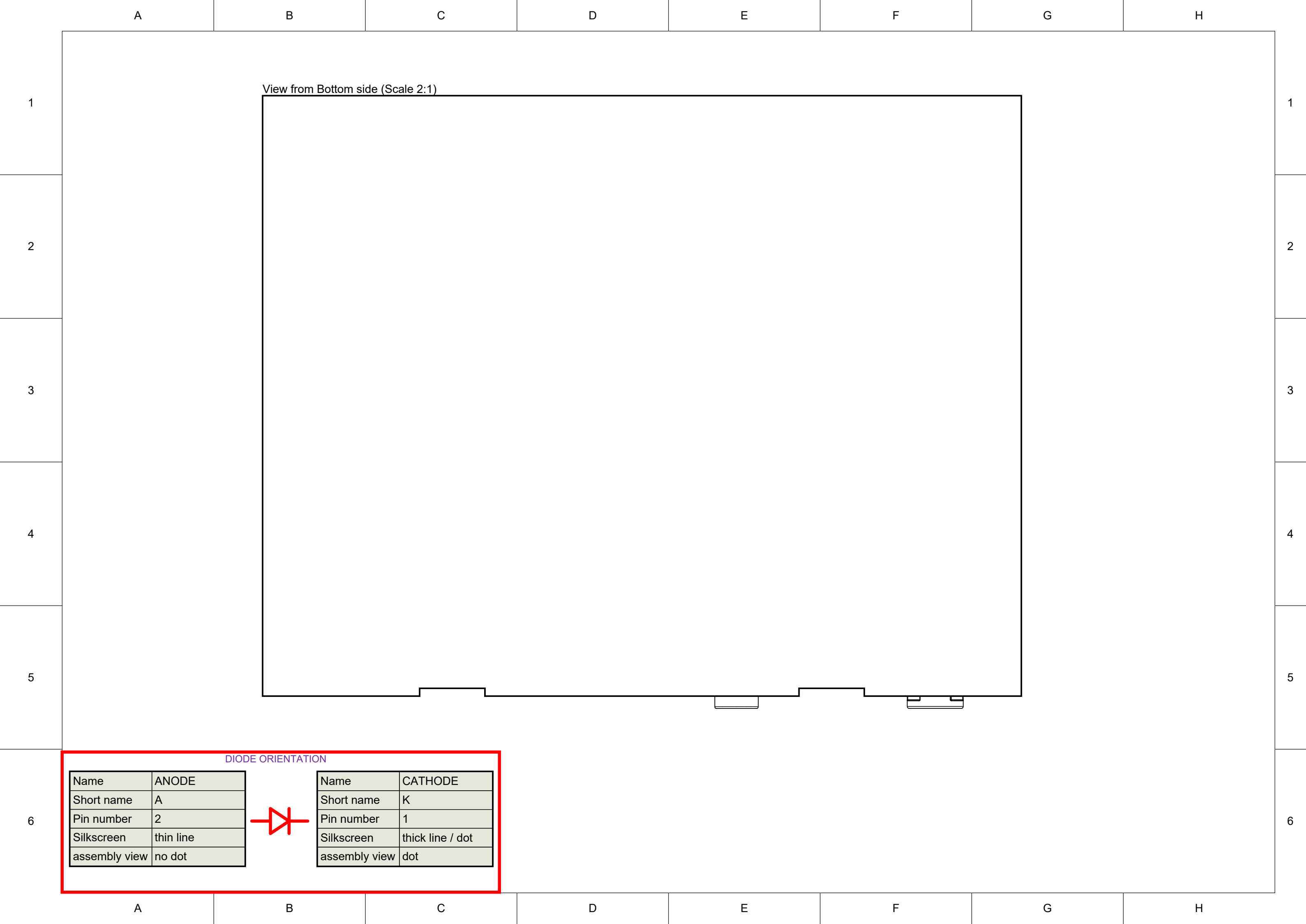


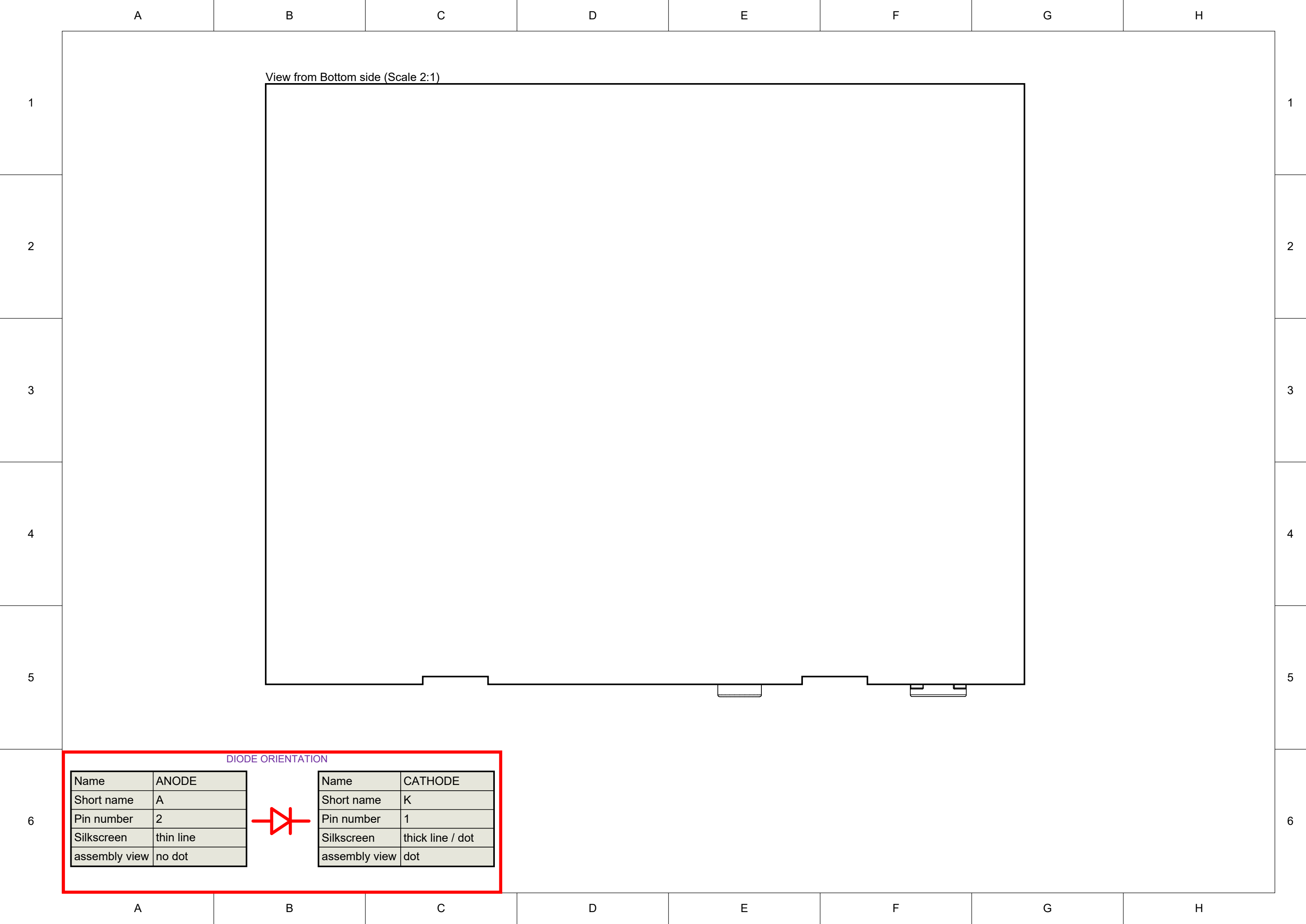
DIODE ORIENTATION

Name	ANODE
Short name	A
Pin number	2
Silkscreen	thin line
assembly view	no dot



Name	CATHODE
Short name	K
Pin number	1
Silkscreen	thick line / dot
assembly view	dot





A

B

C

D

E

F

G

H

1

2

3

4

5

6

1

2

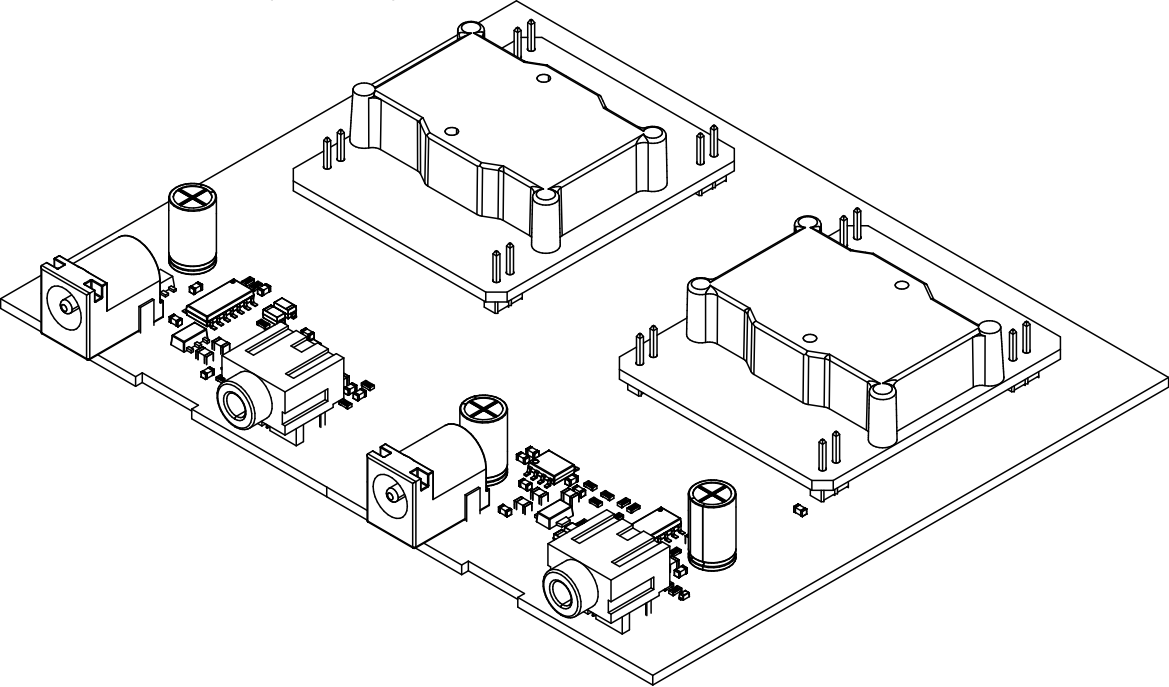
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4

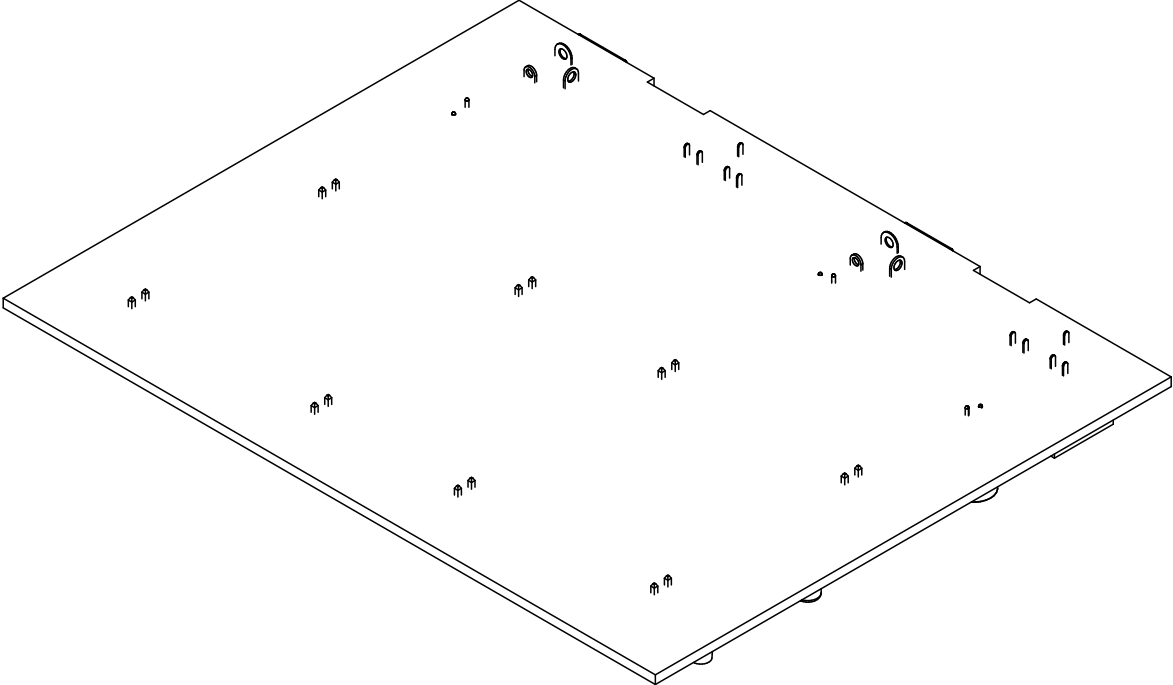
5

6

View from Front side (Scale 1:1)



View from Back side (Scale 1:1)



	A	B	C	D	E	F	G	H																																																																																																																																																										
1	<div>Bill Of Materials</div> <table><tr><th>Line #</th><th>Description</th><th>Designator</th><th>Quantity</th><th>Manufacturer Part Number 1</th><th>Part Number</th><th>Layer</th></tr><tr><td>1</td><td>CAP THT ELEC 220uF 25V 20%</td><td>C1, C14, C17</td><td>3</td><td>25PK220MEFC-6.3*11</td><td>1a28df19-6d3e-4a71-836c-f22920f8e8ab</td><td></td></tr><tr><td>2</td><td>CAP SMD MLCC 1nF 50V 0603 X7R</td><td>C10, C13, C26</td><td>3</td><td>CL10B102KB8NNNC</td><td>0eca2548-3630-4fea-a3d5-94248c1cae74</td><td></td></tr><tr><td>3</td><td>CAP SMD MLCC 10uF 25V 0805 X5R</td><td>C3, C4, C8, C9, C12, C16, C19, C20, C29</td><td>9</td><td>CL21A106KAYNNNE</td><td>1ffbe5a9-0884-4740-bdad-20a6a98400e6</td><td></td></tr><tr><td>4</td><td>CAP SMD MLCC 100nF 25V 0603 X7R</td><td>C2, C5, C6, C7, C11, C15, C18, C21, C22, C23, C24, C25, C27, C28</td><td>14</td><td>CL10B104KA8NNNC</td><td>02841f84-ac15-41b5-9e17-915f8f067828</td><td></td></tr><tr><td>5</td><td>CONN THT 3.5mm AUDIO STEREO AUX SWITCH</td><td>P2, P8</td><td>2</td><td>PJ-3900-04</td><td>80507a24-5d7c-4cf5-953e-f54832d54564</td><td></td></tr><tr><td>6</td><td>CONN THT DC JACK 0.5A 30VDC 5Kcycles</td><td>P1, P7</td><td>2</td><td>DC-005A-20A</td><td>b53db51a-1725-412b-9039-fa7a45c7c438</td><td></td></tr><tr><td>7</td><td>CONN THT PIN HEADER 2P MALE 2.54mm</td><td>P3, P4, P5, P6, P9, P10, P11, P12</td><td>8</td><td>Z-211-0211-0021-001</td><td>fb9043ef-1dd5-4a9c-8c1a-da0c667690ac</td><td></td></tr><tr><td>8</td><td>DIODE SMD 100V 150mA 1.5Vf SOD-123 4148</td><td>D3, D4, D5, D7, D8</td><td>5</td><td>1N4148W-TP</td><td>5e920700-75df-48e3-84dd-8f9f777caed8</td><td></td></tr><tr><td>9</td><td>DIODE SMD TVS 3.3V BIDIRECTIONAL SOD-523</td><td>D1, D2, D6</td><td>3</td><td>PESD3V3S1BA-N</td><td>d6266fd0-7428-4fb9-a062-338cdce926fd</td><td></td></tr><tr><td>10</td><td>FER SMD CHIP 0603 400mA 1k@100MHz 500mOhm</td><td>L1, L2</td><td>2</td><td>BLM18BD252SN1D</td><td>c9e30ae8-9d5b-4135-a079-b1147da846d8</td><td></td></tr><tr><td>11</td><td>IC SMD LINEAR VOLTAGE REGULATOR 5V 100mA SOT-89</td><td>U1, U5</td><td>2</td><td>AS78L05RTR-E1</td><td>fd64863e-487f-4688-b264-696c0ba5456b</td><td></td></tr><tr><td>12</td><td>IC SMD NAND GATE 2 INPUTS 74X00 SC-74A</td><td>U6</td><td>1</td><td>74LVC1G00GV,125</td><td>33900555-dbb4-4b72-871f-952983a59b08</td><td></td></tr><tr><td>13</td><td>IC SMD OPAMP LM324DT SO-14</td><td>U2, U7</td><td>2</td><td>LM324DT</td><td>21a85167-c328-42f7-a52e-365842c6dad3</td><td></td></tr><tr><td>14</td><td>IC SMD RF MIXER SA612A SOIC-8</td><td>U3</td><td>1</td><td>SA612AD/01,112</td><td>a9622f6c-68f2-4f08-abc9-76f38977fdd3</td><td></td></tr><tr><td>15</td><td>IC SMD TIMER NE555 SOIC-8</td><td>U8</td><td>1</td><td>NE555DR</td><td>d16ab88a-2543-469a-8940-7b800b633548</td><td></td></tr><tr><td>16</td><td>MODULE THT RADAR DOPPLER 10.525GHz NJR4178</td><td>U4, U10</td><td>2</td><td>NJR4178</td><td>f0e19a38-18de-4253-8da2-aebb0c4083bd</td><td></td></tr><tr><td>17</td><td>RES SMD 0 OHM 5% 1/10W 0603</td><td>R3, R4, R7, R8, R14, R16</td><td>6</td><td>RC0603JR-070RL</td><td>6ae227f9-847f-4766-8522-e11a83531204</td><td></td></tr><tr><td>18</td><td>RES SMD 1K OHM 1% 1/10W 0603</td><td>R18, R22, R23, R24, R27</td><td>5</td><td>RC0603FR-071KL</td><td>a678220f-9e9d-4863-a833-9993504f723c</td><td></td></tr><tr><td>19</td><td>RES SMD 10K OHM 1% 1/10W 0603</td><td>R1, R6, R10, R11, R12, R15, R19, R20, R21, R25</td><td>10</td><td>RC0603FR-0710KL</td><td>93242766-ba1d-462d-b58f-ce1dfc4129c8</td><td></td></tr><tr><td>20</td><td>RES SMD 100K OHM 1% 1/10W 0603</td><td>R2, R5, R9, R13, R17, R26</td><td>6</td><td>RC0603FR-07100KL</td><td>76af10b3-9d85-4b5c-a2d6-26cc74f432f7</td><td></td></tr><tr><td>21</td><td>TRANS NPN BCX56-16 1A 80V 1.25W SOT-89-3</td><td>U9</td><td>1</td><td>BCX56-16,115</td><td>0e502e05-00ae-4c6f-83a4-b2f55de2403a</td><td></td></tr></table>							Line #	Description	Designator	Quantity	Manufacturer Part Number 1	Part Number	Layer	1	CAP THT ELEC 220uF 25V 20%	C1, C14, C17	3	25PK220MEFC-6.3*11	1a28df19-6d3e-4a71-836c-f22920f8e8ab		2	CAP SMD MLCC 1nF 50V 0603 X7R	C10, C13, C26	3	CL10B102KB8NNNC	0eca2548-3630-4fea-a3d5-94248c1cae74		3	CAP SMD MLCC 10uF 25V 0805 X5R	C3, C4, C8, C9, C12, C16, C19, C20, C29	9	CL21A106KAYNNNE	1ffbe5a9-0884-4740-bdad-20a6a98400e6		4	CAP SMD MLCC 100nF 25V 0603 X7R	C2, C5, C6, C7, C11, C15, C18, C21, C22, C23, C24, C25, C27, C28	14	CL10B104KA8NNNC	02841f84-ac15-41b5-9e17-915f8f067828		5	CONN THT 3.5mm AUDIO STEREO AUX SWITCH	P2, P8	2	PJ-3900-04	80507a24-5d7c-4cf5-953e-f54832d54564		6	CONN THT DC JACK 0.5A 30VDC 5Kcycles	P1, P7	2	DC-005A-20A	b53db51a-1725-412b-9039-fa7a45c7c438		7	CONN THT PIN HEADER 2P MALE 2.54mm	P3, P4, P5, P6, P9, P10, P11, P12	8	Z-211-0211-0021-001	fb9043ef-1dd5-4a9c-8c1a-da0c667690ac		8	DIODE SMD 100V 150mA 1.5Vf SOD-123 4148	D3, D4, D5, D7, D8	5	1N4148W-TP	5e920700-75df-48e3-84dd-8f9f777caed8		9	DIODE SMD TVS 3.3V BIDIRECTIONAL SOD-523	D1, D2, D6	3	PESD3V3S1BA-N	d6266fd0-7428-4fb9-a062-338cdce926fd		10	FER SMD CHIP 0603 400mA 1k@100MHz 500mOhm	L1, L2	2	BLM18BD252SN1D	c9e30ae8-9d5b-4135-a079-b1147da846d8		11	IC SMD LINEAR VOLTAGE REGULATOR 5V 100mA SOT-89	U1, U5	2	AS78L05RTR-E1	fd64863e-487f-4688-b264-696c0ba5456b		12	IC SMD NAND GATE 2 INPUTS 74X00 SC-74A	U6	1	74LVC1G00GV,125	33900555-dbb4-4b72-871f-952983a59b08		13	IC SMD OPAMP LM324DT SO-14	U2, U7	2	LM324DT	21a85167-c328-42f7-a52e-365842c6dad3		14	IC SMD RF MIXER SA612A SOIC-8	U3	1	SA612AD/01,112	a9622f6c-68f2-4f08-abc9-76f38977fdd3		15	IC SMD TIMER NE555 SOIC-8	U8	1	NE555DR	d16ab88a-2543-469a-8940-7b800b633548		16	MODULE THT RADAR DOPPLER 10.525GHz NJR4178	U4, U10	2	NJR4178	f0e19a38-18de-4253-8da2-aebb0c4083bd		17	RES SMD 0 OHM 5% 1/10W 0603	R3, R4, R7, R8, R14, R16	6	RC0603JR-070RL	6ae227f9-847f-4766-8522-e11a83531204		18	RES SMD 1K OHM 1% 1/10W 0603	R18, R22, R23, R24, R27	5	RC0603FR-071KL	a678220f-9e9d-4863-a833-9993504f723c		19	RES SMD 10K OHM 1% 1/10W 0603	R1, R6, R10, R11, R12, R15, R19, R20, R21, R25	10	RC0603FR-0710KL	93242766-ba1d-462d-b58f-ce1dfc4129c8		20	RES SMD 100K OHM 1% 1/10W 0603	R2, R5, R9, R13, R17, R26	6	RC0603FR-07100KL	76af10b3-9d85-4b5c-a2d6-26cc74f432f7		21	TRANS NPN BCX56-16 1A 80V 1.25W SOT-89-3	U9	1	BCX56-16,115	0e502e05-00ae-4c6f-83a4-b2f55de2403a		1
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3	<div>Please consider LCSC (□□□□) as our first supplier</div>							3																																																																																																																																																										
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